

SOLNTSEV, V.P.; GOLUBEV, V.A.

Investigating the process of combustion of gasoline-air mixture under conditions of interaction of turbulent trails originated in stabilizers. Izv.vys.ucheb.zav.; av.tekh. 2 no.3: 112-118 '59. (MIRA 12:12)

1. Moskovskiy aviatsionnyy institut. Kafedra AD-1.
(Combustion) (Turbulence)

PHASE I BOOK EXPLOITATION

SOV/5752

Gorbunov, G. M., Candidate of Technical Sciences, Docent, ed.

~~Stabilizatsiya plameni i razvitiye protsessa sgoraniya v turbulentnom potoke; sbornik statey~~ (Stabilization of the Flame and the Development of the Combustion Process in a Turbulent Flow; Collection of Articles) Moscow, Oborongiz, 1961. 169 p. Errata slip inserted. 2,650 copies printed.

Sponsoring Agency: Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya RSFSR.

Ed.: K. Ya. Zaytseva, Engineer; Ed. of Publishing House: N. G. Kopylova; Tech. Ed.: V. P. Rozhin; Managing Ed.: A. S. Zaymovskaya, Engineer.

PURPOSE: This collection of articles is intended for engineers and scientific workers concerned with combustion problems, and for advanced students in related courses in schools of higher technical education.

Card 1/3

Stabilization of the Flame (Cont.)

SOV/5752

COVERAGE: The collection contains 7 articles describing experimental investigations of the mechanism of flame stabilization and propagation in open and closed turbulent flows. Experimental data on intensity, extent and frequency patterns of turbulence, temperatures, flame ionization, etc., are presented. The investigations contribute to a better understanding of some of the phenomena taking place in a ramjet combustion chamber. The authors thank V.B. Rutovskiy, I. S. Makarov, A. V. Goryacheva, V. I. Biteryakova, and Ye. V. Trofimova. References accompany six articles.

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11.726
S/124/62/000/009/020/026
A001/A101

AUTHOR: Solntsev, V. P.

TITLE: Experimental investigation of turbulence parameters in the core of a free jet

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 9, 1962, 88, abstract 9B600
(In collection: "Stabilizatsiya plameni i razvitiye protsessy sgoraniya v turbulentn. potoke", Moscow, Oborongiz, 1961, 7 - 30)

TEXT: In connection with studying the turbulence effect on the speed of flame propagation, the author measured longitudinal speed pulsations in air jets flowing out of a nozzle with a free outlet cross section and also at the presence of various turbulizing gratings at the outlet; an ETAM-3 A (ETAM-3A) thermo-anemometer was used for measurements. Data are presented on pulsation profile at various distances from the nozzle cut at different conditions, and an empirical formula is suggested for variation of turbulence along the jet axis. The results of a simplified analysis of frequency spectrum are reported, and information is given on the correlation of pulsations measured with two headpieces. There are 13 references.

[Abstracter's note: Complete translation]
Card 1/1

B. A. Fidman

11832
S/262/62/000/004/004/024
1014/1252

AUTHOR: Solntsev, V. P.

TITLE: The influence of turbulence parameters on the combustion process of a homogeneous gasoline-air mixture behind stabilizers, under closed-flow condition

PERIODICAL: Referativnyy zhurnal, Silovyye ustanovki, no. 4, 1962, 28, abstract 42.4.155. In collection, "Stabilizatsiya plameni i gazvitye protsessy sgoraniya v turbulentnykh potokakh", M. Oborongiz, 1961, 75-108

TEXT: The problem of turbulence parameters behind a bluff body, the influence of the form and dimensions of the stabilizers on the former and that of the turbulence parameters on the combustion process of a gasoline - air mixture is investigated theoretically and experimentally. It was ascertained that the intensity and degree of turbulence as well as the position of the front of the flame, are independent of the velocity of the incident flow. The rate of flame propagation is proportional to the first-order pulsation component and does not depend on the degree of turbulence. An increase in the angle of divergence and in the dimensions of the stabilizer leads to an increase in the degree of turbulence. A rise in the initial turbulence contributes to more intense heat generation and more efficient exploitation of the volume of the combustion chamber. There are 33 figures and 6 references.

[Abstracter's note: Complete translation.]

X

Card 1/1

O predel'nom provedeni integral'nykh krivykh odnoy sistemy differentsial'nykh uravneniy.
Izv. ser. matem., 9 (1945), 233-240.

SO: Mathematics in the USSR, 1917-1947

edited by Kurosh, A. G.,

Marlinskovich, A. I.,

Rashevskiy, P. K.

Moscow-Leningrad, 1948

Tele. 100, 11/1/1951

Diagrammatic criterion for the possibility of equilibrium in a system of two differential equations in case of discontinuous right-hand parts. Dokl. Akad. Nauk. No. 102, 1951.

Monthly list of Russian accessions, Library of Congress, May 1952, UNCLASSIFIED.

SOLNTSEV, Yu.K.

Two examples of dynamic systems defined by infinite systems of differential equations. Uch.zap.Mosk.un. '52. (MIRA 8:7)
(Differential equations) (Topology)

NIKOL'SKIY, Sergey Mikhaylovich; SOLNTSEV, Yu.K., red.; YERMAKOVA, Ye.A.,
tekhn.red.

[Quadrature formulas] Kvadraturnye formuly. Moskva, Gos. izd-vo
fiziko-matematicheskoi lit-ry, 1958. 122 p. (MIRA 11:5)
(Mathematics--Formulae)

30843

S/044 / 61/000/008/014/039

C111/C333

14.3400

AUTHOR: Solntsev, Yu. K.

TITLE: On the continuous dependence of the solutions of systems of differential equations with piecewise continuous right hand sides on the initial conditions

PERIODICAL: Referativnyy zhurnal, Matematika, no. 8, 1961, 29, abstract 8B134. ("Uch. zap. MGU", vyp. 186, 191-203, 1959)

TEXT: In the domain G the system of equations

$$\frac{dx_i}{dt} = f_i(x_1, \dots, x_n), \quad i = 1, \dots, n \quad (1)$$

is considered, the right hand sides of which can possess discontinuities only on the smooth surfaces S_j which decompose G into the domains G_1, \dots, G_m . On the surface S_j points of two kinds are distinguished: 1.) points in which the vector $f = (f_1, \dots, f_n)$ touches the surface S_j ; 2.) points for which there are solutions entering into these points as well as solutions coming out of these points. On S_j the author

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C111/C333

On the continuous dependence of the ...

distinguishes $(n-1)$ dimensional domains consisting of the points of first and second type; in the domains with points of second type the functions f_1, \dots, f_n are assumed not to be given. In points of the surfaces S_j which do not belong to the distinguished domains the functions f_1, \dots, f_n are put equal to zero. As solution of (1) the author denotes an arbitrary solution of the system of integral equations obtained in the usual way from (1). Under small additional restrictions the author proves that at least one solution of (1) which is defined for $0 \leq t < \infty$ goes through an arbitrary point of the domain G if it remains in a closed bounded part of the domain G . Under the assumption that all solutions are defined for $-\infty < t < \infty$, the author investigates the properties of the integral cones and he proves that under certain conditions the system (1) defines a disperse dynamical system.

[Abstracter's note: Complete translation.]

Card 2/2

SOINTSEV, Yu.K.

Estimation of a mixed derivative in $L_p(G)$. Trudy Mat.inst. 64:
211-238 '61. (MIRA 15:3)

(Functional analysis)

SCIENTIF, Yu.I.

Evaluation of mixed derivative in $I_p(G)$. Dokl. AN SSSR
141 no.1:4C-42 '61. (ITA 14:11)

1. Matematicheskii institut im. V.A. Steklova Akademii nauk
SSSR. Predstavleno akademikom P.S. Novikovym.
(Functions, Periodic)
(Topology)

MANTUHOV, Oleg Vasil'yevich; SOINTSEV Yurly Konstantinovich;
SORKIN, Yuriy Isaakovich; FEDIN, Nikolay Georgiyevich;
FUL'KIN, S.P., doktor fiz.-mat. nauk, retsenzent;
KONDRAT'YEV, V.A., kand. fiz.-mat. nauk, retsenzent;
MISHIN, V.I., kand. ped. nauk, retsenzent; VEYTSMAN,
I.B., prepodavatel', retsenzent; KREYDLIN, Ye.G., pre-
podavatel', retsenzent; PYSHKALO, A.M., prepodavatel',
retsenzent; DITKIN, V.A., prof., red.; YAKOVKIN, M.V.,
red.

[Explanatory dictionary of mathematical terms; textbook
for teachers] Tolkovyi slovar' matematicheskikh terminov;
posobie dlia uchitelei. Moskva, Prosveshchenie, 1965.
539 p. (MIRA 18:7)

SOLNTSEV, Yu. F.

А.П.Принце	Влияние отдельных элементов на свойства стали в процессе горячей обработки.
О.Д.Михайлов	
Л.М.Белкин	
М.С.Иванов	
М.И.Павлов	Влияние условий роста на структуру мартенситных зерен.
В.Д.Каминский	
Э.Н.Тарас	
С.Я.Сидор	Взаимосвязь и зависимость структуры стали от условий горячей обработки.
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Н.Н.Гурьев	Изменение структуры стали в процессе горячей обработки.
А.А.Маслов	
А.А.Маслов	
В.В.Гурьев	

report submitted for the 5th Physical Chemical Conference on Steel Production, Moscow-- 30 Jun 1959.

SOLNTSEV, Yuriy Parfir'yevich; GALKIN, Mikhail Fedorovich; LITVAK, Valeriy Abramovich; SLITSKAYA, I.M., inzh., red.; SHILLING, V.A., red. izd-va; BELOGUROVA, I.A., tekhn. red.

[Reducing metal consumption for risers of ingots and castings]
Puti snizheniya raskhoda metalla na pribyl'nuiu chast' slitkov i
otlivok. Leningrad, 1961. 21 p. (Leningradskii Dom nauchno-
tekhnicheskoi propagandy. Obmen peredovym opytom. Seriya: Liteinoe
proizvodstvo, no.2) (MIRA 14:7)

(Steel castings)

GALKIN, Mikhail Fedorovich; SOLNTSEV, Yuriy Porfir'yevich; SEROV,
Gennadiy Vladimirovich; SOKOLOV, A.N., red.; KATSNEL'SON,
N.Ye., red.izd-va; GVIRTS, V.L., tekhn. red.

[Improved procedure for the smelting of 1Kh18N9TL steel]
Usovershenstvovanie tekhnologii vyplavki stali 1Kh18N9TL
Leningrad, 1962. 20 p. (Leningradskii dom nauchno-
tekhnicheskoi propagandy. Obmen peredovym opytom. Seriya:
Liteinoe proizvodstvo, no.4) (MIRA 15:10)
(Chromium-nickel steel--Metallurgy)

GULYAYEV, B.B., doktor tekhn. nauk, prof., otv. red.; GET'MAN,
A.A., kand. tekhn. nauk, red.; Kiselev, Yu.F., kand.
tekhn. nauk, red.; Shchegolev, I.L., kand. tekhn. nauk,
red.; KUZIN, A.V., inzh., red.

[Gases in cast metal] Gazy v litom metalle. Moskva, Izd-vo
"Nauka," 1964. 262 p. (MIRA 17:6)

1. Moscow. Institut mashinovedeniya.

SOLNTSEV, Yu.P., kand. tekhn. nauk; GULYAYEV, Yu.P., kand. tekhn. nauk

Calculation of risers for steel ingots. Stal' 25
no.4:319-322 Ap '65. (MIRA 18:11)

GULYAYEV, B.B. (Leningrad); SOLNTSEV, Yu.P. (Leningrad)

Steel crystallization and the structure of an ingot. Izv. AN SSSR.
Met. no. 5:27-40 S-O '65. (MIRA 18:10)

SOLNTsEV, Z. Ya.

23481. RUBKI UKhODA, KAK METOD TsELEVOGO LESOVYRASHchIVANIYa. V SB:
ISSLEDOVANIYa PO LES. KhoZ-VU. L., 1948 (NA OBL: 1949), c. 303-12

SO: LETOPIS' NO. 31, 1949.

SOLNTSEV, Z. Ya.

SOLNTSEV, Z. Ya. --"Forestry Principles Concerning Felling and Natural Replenishment of the Mountain Forests of the Caucasus." *(Dissertations for Degrees in Science and Engineering Defended at USSR Higher Educational Institutions) Inst of Forestry, Acad Sci USSR, Leningrad, 1955 (55-23492).

SO: Knizhnaya Letopis', No.25, 18 Jun 55

* For Degree of Candidate in Agricultural Sciences

SOLNTSEV, Z.Ya.

Forest cultivation in the mountains of the Northern Caucasus.
Geog. sbor. no.5:94-106 '55. (MLRA 9:6)
(Caucasus, Northern--Forests and forestry)

SOINTSEV, Z.Ya.

Effect of hauling timber on erosion processes in mountain
forests of the Caucasus. Geog.sbor.no.5:138-143 '55.
(MLRA 9:6)

(Caucasus--Erosion) (Lumbering)

SOLNTSEVA, A. S.

USSR/Miscellaneous - Materials

Card : 1/1

Authors : Luga, A. A., and Solntseva, A. S.

Title : Study of wood pulp of 700-years old posts

Periodical : Dokl. AN SSSR, 96, Ed. 5, 937 - 940, June 1954

Abstract : Wooden posts (oak and pine) continuously covered by insipid water or driven into the ground below the water line are considered as elements with unlimited service life. Parts of the posts protruding above the water line are subject to destruction from the comparatively rapid process of decaying. Wood posts driven into dry ground generally display the same characteristics with one exception that the decaying process spreads down to the lowest level bordering with ground waters. Colored photos are shown of oak and pine samples taken from posts which remained in water for a period of 700 years. Table.

Institution : Ministry of Communications USSR, All-Union Scient-Research Institute of Railroad Construction and Planning.

Presented by : Academician, A. I. Nekrasov, Febr. 22, 1954

SOLNTSEVA, Antonina Yevstaf'yevna, kand. sel'khoz. nauk; TRISHIN, Ivan
Yefimovich, agronom; MIKHNEVICH, A.Ye., red.; TSYURKO, M.I.,
tekh. red.

[Important possibilities for increasing crop yields] Vazhnyi re-
zerv povysheniya urozhainosti. Orenburg, Orenburgskoe knizhnoe
izd-vo, 1960. 27 p. (MIRA 14:12)

(Crop yields)

UDOVIN, G.M., prof., red.; BATALIN, A.Kh., dots., red.; SOLNTSEVA,
A.Ye., dots., red.; OLIFSON, L.Ye., dots., red.; KUCHERENKO,
V.D., dots., red.

[Chemicalization of agriculture in Orenburg Province]Khimiza-
tsiia sel'skogo khoziaistva Orenburgskoi oblasti; trudy. Oren-
burg, Orenburgskii sel'khov. in-t, 1961. 114 p.

(MIRA 16:1)

1. Konferentsiya po khimizatsii sel'skogo khozyaystva Oren-
burgskoy oblasti, 2d. 2. Orenburgskiy sel'skokhozyaystvennyy
institut (for all).

(Orenburg Province—Agricultural chemistry)

VOYNOVA, P., inzhener; SOLNTSEVA, G., inzhener; VORONTSOV, S.

New developments in cutting up beef and sheep carcasses. Mias. ind.
SSSR 26 no. 4:11-13 '55. (MLRA 8:10)
(Meat cutting)

SOLNTSEVA
VOYNOVA, P., inzhener; SOLNTSEVA, G., inzhener; GERTSOVA, Kh., inzhener.

New method for scalding swine carcasses. Mias.ind.SSSR 28 no.1:8-
10 '57. (MLRA 10:3)
(Slaughtering and slaughterhouses) (Hides and skins)

VOYNOVA, P., inzh.; SOLNTSEVA, O., inzh.; GERLITSYN, Z.; REZNIK, I.

Removal of hides from refrigerated carcasses. Mias. ind. SSSR 28 no.6:
13-14 '57. (MIRA 11:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy promyshlennosti (for Voynova, Solntseva). 2. L'vovskiy myasokombinat (for Gerlitsyn, Reznik).

(Lvov--Slaughtering and slaughterhouses) (Hides and skins)

ANFIMOV, A., kand.tekhn.nauk; VOYNOVA, P., inzh.; SOLNTSEVA, G., inzh.

Developing new standards for beef. Mias. ind. SSSR 29 no.2:20-21
'58. (MIRA 11:5)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy promyshlen-
nosti.

(Beef)

VOYNOVA, P., inzh.; KURBATOVA, Ya., inzh.; SOLNTSEVA, O., inzh.

Efficient methods of processing meat by-products. *Mias.ind.*
SSSR 31 no.2:22-24 '60. (MIRA 13:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnny
promyshlennosti.
(Packing-house products)

SMIRNITSKAYA, N.; SOINTSEVA, G.; GRITSAY, N.; SADOVNIKOVA, N.

Draft standards for cattle and beef. Mias. ind. SSSR 31 no.4:31-
34 '60. (MIRA 14:7)

(Cattle--Grading)
(Beef--Grading)

VOYNOVA, P.; SOLNTSEVA, G.

Testing results of the Minsk-59 electric saw. Mias.ind.SSSR 32
no.2:14 '61. (MIRA 14:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy myasnoy promyshlennosti.
(Minsk—Saws) (Meat industry—Equipment and supplies)

SOKOLOV, A., prof.; SOLNTSEVA, G., starshiy nauchnyy sotrudnik;
KARAVAYEVA, S.

Measuring the thickness of fat in live swine with the help of
supersonic waves. Mias. ind. SSSR 32 no.4:30-31 '61. (MIRA 14:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy
promyshlennosti.

(Swine)

(Ultrasonic waves--Industrial application)

SOV/32-25-3-38/62

25(2)

AUTHORS:

Solntseva, G. A., Yagn, Yu. I.

TITLE:

Reverser for Material Tests of Triaxial Compression (Reverser dlya ispytaniy materialov na trekhosnoye szhatiye)

PERIODICAL:

Zavodskaya Laboratoriya, 1959, Vol 25, Nr 3, pp 355-356 (USSR)

ABSTRACT:

The described reverser facilitates the carrying out of various triaxial compressions in a normal press. The press effect is therefore distributed to three components with a vertical effect upon one another. The reverser was worked out for tests of rectangular samples with a maximum side length of 5 mm in the case of loads of up to 1 ton on Gagarin presses. The scheme of the reverser (Fig 1) shows that the pressure is transmitted over a ball onto a beam. The ends of the beam transfer the two force components over two bell cranks, which are mobile thanks to a ball bearing attachment, to the two sides of the sample. The third load component acts from above onto the sample and acts also with the aid of a ball bearing attachment. Side pressure can be changed independent of vertical pressure. A test of the reverser by means of a specially constructed dynamometer showed that by the use of corrective factors in the

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SOV/32-25-3-38/62

Reverser for Material Tests of Triaxial Compression

computation formulae the friction caused by the reverser can be taken into account. The reverser was applied to scientific investigations of plastic deformation, may, however, also serve for the purpose of investigating resistance and plasticity of materials in industry laboratories. There is 1 figure.

ASSOCIATION: Leningradskiy politekhnicheskii institut im. M. I. Kalinina
(Leningrad Polytechnic Institute imeni M. I. Kalinin)

Card 2/2

SOLNTSEVA, G.A.

Improving the testing of small specimens for three-axial and two-axial
compression under simple and combined load conditions. Trudy LPI
no.211:155-165 '60.

(MIRA 13:11)

(Deformations (Mechanics)--Testing)

GRUDEV, D.I., doktor sel'skokhoz. nauk; SADOVNIKOVA, N.V., starshiy nauchnyy sotrudnik; SMIRNITSKAYA, N.Ye.; KARAVAYEVA, S.G.; KOTOV, P.Ya.; RODIONOVSKIY, M.S.; KRYLOVA, N.N., kand. biol. nauk; KRASIL'NIKOVA, T.F., inzhener-khimik; SOLNTSEVA, G.D., aspirant; KUZNETSOVA, V.V., mladshiy nauchnyy sotrudnik; Prinimali uchastiye: BAZAROVA, K.I.; MALYGINA, M.I.; BUDINSKAYA, S.Z.; SINITSYNA, I.K.

Comparative evaluation of the fattening and slaughtering characteristics of Shorthorn and Kalmyk steers and physico-chemical indices of their meat. Trudy VNIIMP no.16:5-23 '64.
(MIRA 18:11)

POLEZHAYEV, L.V.; KOLCHIN, S.F.; SOLOVYOVA, S.M.

Stimulation of regeneration of the heart muscle in diphtherial
myocarditis. Dokl. AN SSSR 164 no.4:949-952 1965.

(MIRA 18:10)

1. Institut morfologii zhivotnykh im. A.N.Sevchenko AN SSSR.
Submitted April 27, 1965.

(MIPENKOVA-VICHTOROVA, T.K.; SOLNTSEVA, I.V.

Carcinosarcoma of the breast; a single observation. Vop. onk.
11 no.9:88-89 '65. (MIRA 18:4)

1. Iz Instituta rentgenologii i radiologii Ministerstva zdравo-
okhraneniya RSFSR (dir. - prof. I.G.Lagunova, zav. radiologi-
cheskim otdelom - prof. A.V.Kozlova, zav. patomorfologicheskim
otdelom - dotsent Ye.D.Savchenko).

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PROCESSES AND PROPERTIES INDEX

Symbiosis of cellulose-decomposing and nitrogen-fixing bacteria. A. A. Imshenetski and L. I. Saitseva. *Microbiology* (U. S. S. R.) 6, 780-782 (in English, 1962, 3) (1960); cf. C. A. 35, 487. — *Myxococcus* (*Cytophaga*) *hutchinsonii* (I), *Autobacter chroococcum* (II) and *Bact. radicola* (III) are symbiotic. The growth of N-fixing bacteria, II and III, is possible only while I is growing alone. The presence of II in a culture of I does not accelerate cellulose decomposition. Thus between I and II or III only metabolic relations exist. The cellulose fermentation products are utilized by II but II does not fix N in a medium containing these products. The growing II assimilates org. acids first, then the glucose. T. Laanes

ASD SLA METALLURGICAL LITERATURE CLASSIFICATION

110-00119

111111 001 000 101

111111 001 000 101

CA

11C

Production of amylase from cultures of thermophilic bacteria. A. A. Imshenetski and L. I. Solntseva. *Microbiology U.S.S.R.* 13, 54-64 (in English, 64) (1944); cf. C.A. 38, 3317. — A potato medium is best for raising *B. pasteurii* (1) on a large scale. To each 100 l. of water 5 kg. of chopped potatoes and 100 g. of chalk are added. Sterilize in the autoclave 30 min. at 1.5 atm., allow to cool to 65°, then remove the container with potatoes, and decant the liquid for use as a medium. 8- and Cl-free water is recommended. The culture vessels should be of Al, or tinned or enameled Fe. The standard strain of 1 can be kept in a medium contg. peptone 0.5, chalk 0.1, agar 2 g., and 20% potato infusion 100 cc. If transfers are made every 20-24 days. (Aerobic) aeration of the culture is imperative. Optimal temp. is 60°. The amylase (superbiolase) accumulates directly in the culture vessel and, when tapped, should be kept at 2-4°. To obtain a dry prepn. the product is desiccated at 60° or pptd. with $(\text{NH}_4)_2\text{SO}_4$ (60 kg. per 100 l. of culture), and the ppt. dried at 70°. The yield from 100 l. culture is 400-500 g. dry amylase. Drying and storage do not affect the activity of the product, which, however, may contain large amts. of $(\text{NH}_4)_2\text{SO}_4$. T. Laanes

ASB-SLA DETALLURGICAL LITERATURE CLASSIFICATION

SOLNTSEVA, L. I.

"Thermophylic Butyric-acid Bacteria," Mikrobiol., 14, No. 5, 1945. Mbr., Inst. Microbiology, Dept. Biol. Sci., Acad. Sci., -1945.

SOLNTSEVA, L. I.

PA 50/49T63

USSR/Medicine - Acetobacter Aceti
Medicine - Microbiology

May/Jun 49

"Structure of Acetic-Acid Bacteria," L. I.
Solntseva, Inst of Microbiol, Acad Sci USSR,
Moscow, 4 pp

"Mikrobiol" Vol XVIII, No 3

Among other conclusions, states that acetic-acid
bacteria do not contain individual nuclear structure
and chromosomes, and that each cell, as a
whole, is a heredity carrier. Submitted 12 Feb 48.

50/49T63

ISHERNETSKIY, A. A.; SOLNTSEVA, L. I.

Thermophil pectin bacteria. Mikrobiologiya, Moskva 19 no.
5:418-425 Sept-Oct 1950. (CML 20:1)

1. Institute of Microbiology, Academy of Sciences USSR, Moscow.

SOLNTSEVA, L. I.

RT-1625 (The methods for the investigation of filterable forms of bacteria) K
metodike izucheniia fil'truiushchikhsia form bakterii.
MIKROBIOLOGIJA, 22(2): 151-154, 1953

Describes expts supported by microphotographs, which revealed that the "feeder" method used for detecting filterable forms of bacteria is undependable. This was demonstrated by the appearance of microcolonies of polymorphous elements on test plates (contg *Sarcina aurantiaca* as a "feeder") although no filtrate of bacterial cultures had been added. A study of the bacteria forming microcolonies is carried out in order to determine if ~~the bacteria of interest~~ they are derived from filterable forms of bacteria found in the air, or represent previously unidentified air microbes which do not develop in standard nutritive media.

255T11

SOLNTSEVA, L.I.

652-655 N-D '53.

Giant bacterial cells and filtrable forms. Mikrobiologiya 32 no.6:
(MLRA 6:12)

1. Institut mikrobiologii Akademii nauk SSSR, Moscow.

(Bacteria)

IMSHENETSKIY, A.A.; SOLNTSEVA, L.I.

Filtrable forms and variability of *Bact. fluorescens liquefaciens*.
Mikrobiologiya 23 no.1:27-28 Ja-F '54. (MLRA 7:2)

1. Institut mikrobiologii Akademii nauk SSSR, Moscow.
(*Pseudomonas fluorescens*)

USSR/Biology

FD 288

Card 1/1

Author : Solntseva, L. I.

Title : The filtrable forms of bacteria in the air

Periodical : Mikrobiologiya, 23, 249-251, May/Jun 1954

Abstract : Cultures consisting of fine polymorphous elements which grew poorly in nutrient media were obtained by sowing filtrates both of water through which air had been blown, and of water suspensions of dust. Sowing the filtrate obtained after passing these cultures through Seitz or Chamberland filters yielded negative results. Only 3 positive cultures were obtained from 29 sowings. One positive culture, which the author concedes was due to contamination of the medium, was obtained from the 22 control sowings of distilled water. Nevertheless, according to the author, the isolated cultures represent filtrable forms of bacteria, or belong to a little investigated group of microorganisms. The work is illustrated by two photographs and the results are presented in a table. One reference is cited.

Institution : Institute of Microbiology, Academy of Sciences, USSR; Moscow

Submitted : December 16, 1953

SAINTSEVA - L.F.

✓ Obtaining cell-free liquid from *Azotobacter* cultures. A. A. Imshenetskii, L. I. Sointseva, K. Z. Perova, and N. F. Kuranova (Inst. Microbiol., Acad. Sci. U.S.S.R., Moscow). *Mikrobiologiya* 25, 164-70(1956).—For high N-fixing capacity *A. chroococcum* should be cultured in thick, non-nitrogenous media; sugar utilization is then complete in 21-48 hours. All tested cultures had about the same capacity, 15.8-18.1 mg. N/g. of glucose. The best method for destroying the *Azotobacter* cells is grinding with Al_2O_3 . For a mucilaginous consistency of the cell-free liquid it is best to centrifuge in water, which may be phosphate buffered; the centrifuged liquid is not totally cell-free. I. P. Smith

med #

IMSHENETSKIY, A.A.; SOLNTSEVA, L.I.; PEROVA, K.Z.; KURANOVA, N.F.

On the possibility of acellular fixation of nitrogen [with English summary in insert] Mikrobiologiya 25 no.4:401-405 J1-Ag '56.

(MLRA 9:10)

1. Institut mikrobiologii AN SSSR Moskva.

(AZOTOBACTER,

acellular prep., fixation of nitrogen (Rus))

(NITROGEN,

fixation by acellular prep. of Azotobacter (Rus))

IMSHENETSKIY, A.A., SOINTSEVA, L.I.

Filtrable forms of bacteria [with summary in English]. Mikrobiologiya
27 no.3:276-282 My-Je '58 (MIRA 11:9)

1. Institut mikrobiologii AN SSSR.
(BACTERIA,
filtrable forms (Rus))

17(2,10)
AUTHORS:

SOV/20-124-4-56/67
Imshenetskiy, A. A., Corresponding Member AS USSR, Solntseva, L.I.,
Kuranova, N. F.

TITLE:

Experimental Generation of Active Variants of Citric-Acid-Producing
Aspergillus Niger (Eksperimental'noye polucheniye aktivnykh
variantov Aspergillus niger, obrazuyushchikh limonnuyu kislotu)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 4, pp 925-927 (USSR)

ABSTRACT:

It is a well-known fact that micro-organism mutants produced by the influence of radiant energy possess, as a rule, reduced biochemical activity. Some of them belong to the sublethal variants and perish on transplantation, others show definite signs of degeneration, form only small colonies, grow slowly, partially or totally lose the activities of various ferment systems, etc. The development of mutants that possess more active ferment complexes, or that effect the biosynthesis of certain substances more intensively than the initial form does, are comparatively rare. However, these mutants are of particular interest. In the course of these 10 years it has been possible to produce, by the employment of radiant energy in bacteria, yeast and mold fungi, a number of practically utilizable mutants (e.g. Penicillium chrysogenum with a penicillin quantity of 100 times that of the wild initial form).

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SOV/20-124-4-56/67

Experimental Generation of Active Variants of Citric Acid-Producing
Aspergillus Niger

Citric acid is obtained from a culture of Aspergillus niger, which latter oxidizes saccharose into the acid. As the currently used strains of Aspergillus did not include any irradiation-produced variants, the authors studied the physiology of the variants produced by means of ultraviolet light irradiation. The initial culture was the 6/5 developed in the Leningradskiy zavod limonnoy kisloty (Leningrad Plant for Citric Acid). The 1-conidial cultures obtained from it had the same activities with regard to the production of the acid as the initial culture. The cultivation of one of the former was continued. The study of this capacity in individual mutants has facilitated the selection of the most promising cultures (T_1 , T_2 , and X), all of which produced more acid than the initial culture had done. They developed after the administration of 4 doses of ultraviolet irradiation. Their genealogies are shown in figure 1. Mutant T_1 differed also with regard to morphology.

Table 1 shows the formation dynamics of citric acid. From this the following conclusions are derived: (1) The mycelium dry weight of mutant T_1 is 25-30 % lower than that of the initial form. (2) Per

Card 2/3

1 g dry mycelium, the ultraviolet mutant consumes 26-51 % more

SOV/20-124-4-56/67

Experimental Generation of Active Variants of Citric-Acid-Producing

Aspergillus Niger

sugar than the initial form does. (3) Per 1 g dry mycelium, the mutant forms 46-84 % more citric acid than the initial form does. The absolute acid quantity is 16-22 % higher in the mutant culture medium. (4) The citric acid yield, calculated per sugar consumed, varies with the age of the culture, and is 50.7-63.4 % in the initial culture, and 57.7-74.3 % in the mutant. As is the case in the initial strain, the mutants produce almost exclusively citric acid. The above mentioned increased acid yield cannot be explained by a lower sugar consumption for mycelium formation, and is dependent on the biochemical activity of the culture. -There are 1 figure and 1 table.

ASSOCIATION: Institut mikrobiologii Akademii nauk SSSR
(Institute of Microbiology of the Academy of Sciences, USSR)

SUBMITTED: October 30, 1958

Card 3/3

IMSHENETSKIY, A.A.; SOLNTSEVA, L.I.; KURANOVA, N.F.

Experimental variability of *Aspergillus niger*. Part 1: Morphological characteristic of variants obtained as a result of the action of ultraviolet rays. *Mikrobiologiya* 29 no.2:177-183 Mr-Apr '60.
(MIRA 14:7)

1. Institut mikrobiologii AN SSSR.
(ASPERGILLUS) (ULTRAVIOLET RAYS—PHYSIOLOGICAL EFFECT)

JMSHENETSKIY, A.A.; SOLNTSEVA, L.I.; KURANOVA, N.F.

Experimental variability of *Aspergillus niger*. Report No.2: Formation of citric acid by variants of *Asp. niger* obtained through ultraviolet irradiation. Mikrobiologiya 29 no.3:351-357 My-Je '60. (MIRA 13:7)

1. Institut mikrobiologii AN SSSR.

(ASPERGILLUS NIGER)

(CITRIC ACID)

(ULTRAVIOLET RAYS—PHYSIOLOGICAL EFFECT)

IMSHENETSKIY, A.A., akademik; SOLNTSEVA, L.I.; KURANOVA, N.F.

Polyploid yeastlike fungi from the genus Candida. Dokl. AN SSSR
152 no.1:212-215 S '63. (MIRA 16:9)

1..Institut mikrobiologii AN SSSR.
(Candida (Fungus)) (Polyploidy)

IMSHENETSKIY, A.A.; SOLNTSEVA, L.I.; KURANOVA, N.F.

Effect of external factors on the mutants of *Aspergillus niger*.
Mikrobiologiya 32 no.4:616-622 JI-Ag '63. (MIRA 17:6)

1. Institut mikrobiologii AN SSSR.

ACC NR: AP0051372

SOURCE CODE: UR/0079/66/036/009/1711/1711

AUTHOR: Bluznyuk, N. K.; Solntseva, L. M.

ORG: All-Union Scientific Research Institute of Phytopathology (Vsesoyuznyy nauchno-issledovatel'skiy institut fitopatologii)

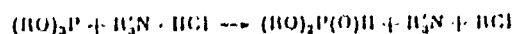
TITLE: Reaction of hydrochlorides of tertiary amines with trialkyl phosphites

SOURCE: Zhurnal obshchey khimii, v. 36, no. 9, 1966, 1711

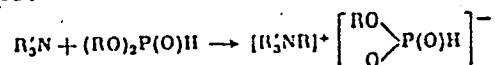
TOPIC TAGS: trialkyl phosphite, tertiary amine, hydrochloride, dialkyl phosphite

ABSTRACT:

Trialkyl phosphites react with hydrochlorides of amines to form dialkyl phosphites, amines, and alkyl chlorides:



In turn, dialkyl phosphites react with amines to form quaternary ammonium salts:



The conditions of the first reaction are strongly dependent on the structure of the amine and phosphite. Temperatures at which 50% of the trialkyl phosphite reacts in 1—3 hr are given in the table.

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UDC: 547.26'118

ACC NR: AP6031392

Table 1.

Trialkyl- phosphite	Amide hydrochloride			
	$C_5H_5N \cdot HCl$	$C_6H_5N(CH_3)_2 \times$ $x \ HCl$	$C_6H_5N(C_2H_5)_2 \times$ $x \ HCl$	$(C_2H_5)_3N \cdot HCl$
$(CH_3O)_3P$	10—20°	40—50°	50—60°	100—110°
$(C_2H_5O)_3P$	30—40	50—60	60—70	110—120

The second reaction proceeds in some cases under mild conditions.

[WA-50; CBE No. 12]

SUB CODE: 07/ SUBM DATE: 21Mar66/

Card 2/2

PETROV, K.A.; NIFANT'YEV, E.Ye.; GOZ'TSOVA, R.G.; SOLNTSEVA, L.M.

Phosphorus-containing polymers. Part 7: Synthesis of polyphosphates and polyphosphinites by glycolysis of amides of trivalent phosphorus acids. Vysokom.soed. 5 no.11:1691-1695 N '63. (MIRA 17:1)

L 4960-66 EWT(m)/EPF(c)/EWP(j)/EWP(t)/EWP(b) IJP(c) JD/RM

ACC NR: AP5025677

SOURCE CODE: UR/0286/65/000/018/0025/0025

AUTHORS: Bliznyuk, N. K.; Kvasha, Z. N.; Solntseva, L. M.; Libman, B. Ya.; Beyn, A. I.; Sevitov, I. B.

ORG: none

TITLE: A method for obtaining dialkylphosphites. Class 12, No. 174624
/announced by Organization of the State Committee for Chemical Industry at Gosplan
SSSR (Organizatsiya gosudarstvennogo komiteta po khimicheskoy promyshlennosti pri
gosplane SSSR)

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 18, 1965, 25

TOPIC TAGS: phosphorus compound, alcohol, dialkylphosphite

ABSTRACT: This Author Certificate presents a method for obtaining dialkylphosphites by reacting phosphorus trichloride with alcohols or alcoholic solution, with subsequent drying of products by a current of dry air. To increase the yield of final product and to simplify the process, trialkylphosphites are added to the reaction mixture in quantities equivalent to the overall content of acidic products.

SUB CODE: OC/ SUBM DATE: 17Oct64

UDC: 547.419.1.07

Card 1/1 *md*

0901 1570

KAZARNOVSKIY, Ya.S.; KOLODEYEV, I.P.; SOROKINA, Ye.M.; IRLIN, A.L.
SOLNTSEVA, L.N.

Oxidative thermal pyrolysis of hydrocarbon gases to acetylene.
Khim. prom. no. 7:547-551 O-N '60. (MIRA 13:12)
(Hydrocarbons) (Acetylene)

SOLNTSEVA, L.P.

Temperature fluctuations during a period of many years in the
south of the European part of the Soviet Union. Uch.zap.
LGU no.269:65-84 '59. (MIRA 12:6)
(Russia, Southern--Atmospheric temperature)

PUDOVKINA, I.A.; PUDOVKINA, Z.V.; SOLNTSEVA, L.S.

Studying wolframites by curves of the infrared absorption spectrum.
Min. sbor. no.15:120-128 '61. (MIRA 15:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo
syr'ya, Moskva.

(Wolframite--Spectra)

YERSHOVA, K.S.; MALINKO, S.V.; SOLNTSEVA, L.S.

Water in calcium metaberates. Min.syr'e no.7:62-70 '63.
(MIRA 16:9)
(Calcium berates)

KRATMAN, A.B.; SOLNTSEVA, L.V.

Standards for containers and packaging. Standartizatsiia 27 no.1:
40-41 Ja '63. (MIRA 17:4)

TIKHOVINSKAYA, M.Yu.; BONDARENKO, A.V.; FARBEROV, M.I.; SOLNTSEVA, L.V.

Reaction of liquid phase catalytic oxidation of tertiary
butyltoluene. Zhur.prikl.khim. 35 no.7:1584-1591 J1 '62.
(MIRA 15:8)

1. Yaroslavskiy tekhnologicheskii institut i Nauchno-issledovatel'-
skiy institut sinteza monomerov dlya sinteticheskogo kauchuka.
(Toluene) (Oxidation)

ACCESSION NR: AP4002556

S/0186/63/005/005/0608/0616

AUTHOR: Paramonova, V. I.; Solntseva, L. V.

TITLE: Study of the state of a solute by ion exchange. 10. Study of europium and terbium complexes with lactic acid

SOURCE: Radiokhimiya, v. 5, no. 5, 1963, 608-616

TOPIC TAGS: rare earth separation, europium, terbium, lactic acid, europium complex, terbium complex, cationic complex, neutral complex, complex formation, ion exchange, cation exchanger, europium separation, terbium separation, lactic acid europium complex, lactic acid complex, lactic acid terbium complex, complexing agent

ABSTRACT: The consecutive steps in the formation of complexes in the europium-lactic acid and terbium-lactic acid systems have been studied by the ion-exchange method. The importance of determining the composition and stability of the last complex formed was emphasized, since the common method for separation of rare earths is based on the difference in the stability of their complexes with lactic acid. Experiments were carried out by adsorption of micro quantities of

Card 1/3

ACCESSION NR: AP4002556

Eu¹⁵²⁻¹⁵⁴ or Tb¹⁵³ on KU-2 cation exchanger from a nitric acid solution containing varied concentrations of lactic acid. A static method was employed. After equilibrium was established between ion exchanger and solution, the β -activity of Eu¹⁵²⁻¹⁵⁴ and Tb¹⁵³ tracers remaining in solution was measured. The relative adsorption (γ_+), defined as the ratio of the quantities of element adsorbed in the presence and in the absence of the ligand (lactate ion), was derived from measurements at ligand concentrations (C_A) 10^{-3} — 3.98×10^{-2} M for Eu and 8.6×10^{-4} to 4.3×10^{-2} M for Tb. Three complexes, $[MA]^{2+}$, $[MA_2]^+$, and $[MA_3]^0$, were detected in solution within C_A ranges determined from plots of $\gamma_+ \times C_A$ or $\gamma_+ \times C_A^2$ versus C_A . The formation of anionic complexes was ruled out in preliminary experiments with anion exchangers. The composition of the two cationic complexes was deduced from the slope of linear plots of $-\log C_A$ versus $\log(\gamma_+/1-\gamma_+)$ or $\log(\gamma_+/1-\gamma_+-\alpha_1)$, where α_1 is the fraction of Eu or Tb, as $[MA]^{2+}$ in solution at equilibrium. The instability constants (K_{1-0} , K_{2-0} , and K_{3-0}) of the three complexes formed from M^{3+} and A^- , and the instability constants (K_{2-1} and K_{3-2}) of MA_2^+ and MA_3^0 formed from MA^{2+} or MA_2^+ and A^- were calculated on the assumption that only the M^{3+} ion was adsorbed on the cation-exchanger. The composition and instability constant of the last complex

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ACCESSION NR: AP4002556

[MA₃]⁰ were determined by approximation. Orig. art. has: 4 tables,
5 formulas and 10 figures.

ASSOCIATION: none

SUBMITTED: 18May62

DATE ACQ: 09Jan64

ENCL: 00

SUB CODE: CH, EL

NO REF SOV: 008

OTHER: 002

Card 3/3

ANTONOVSKIY, V.I.; MAKALITS, B.I.; RYABINSKAYA, V.E.; SEMENOVA, L.V.

Comparative tests of reactors for liquid phase oxidation of
hydrocarbons. Zhur. prikl. khim. 37 no.11:1403-1411 1964
(MIRA 125)

ANTONOVSKIY, V.L.; DENISOV, Ye.T.; KUZNETSOV, I.A.; MEKHRYUSHEV, Yu.Ya.;
SOLNTSEVA, L.V.

Mechanism of the liquid-phase oxidation of cumene studied by the
inhibition method. Part 1: Chain initiation. Kin. i kat. 6 no.4:
607-610 JI-Ag '65. (MIRA 18:9)

1. Novokuybyshevskiy filial Nauchno-issledovatel'skogo instituta
sinteticheskikh spirtov i organicheskikh produktov.

ANTONOVSKIY, V.L.; DENISOV, Ye.T.; SOLNTSEVA, L.V.

Inhibition method in studying the mechanism of liquid-phase oxidation of cumene. Part 2: Mechanism of degenerate chain branching, *Kin. i kat.* 6 no. 1:815-819 S.-O '65.

(MIRA 18:11)

1. Nauchno-issledovatel'skiy institut sinteticheskikh spirtov i organicheskikh produktov, Novokuybyshevskiy filial.

SKVORTSOV, V.V.; OSADCHIYEVA, A.L.; EYDINOVA, G.G.; SOLNTSEVA, L.Ya.

Increased attention to the prevention of intestinal infections in children. Vop. okh. mat. i det. 7 no.3:3-5 Mr '62. (MIRA 15:5)

1. Iz kafedry epidemiologii II Moskovskogo meditsinskogo instituta imeni N.I.Pirogova i sanitarno-epidemiologicheskoy stantsii Oktyabr'skogo rayona Moskvy.

(INTESTINES--DISEASES)

(CHILDREN--DISEASES)

L 9677-66 ENT(1)/FCC GW
ACC NR: AT6012601 (N)

SOURCE CODE: UR/2566/65/078/000/0049/0080

AUTHOR: Solntseva, N. I.

ORG: none*

TITLE: Equatorial western winds in the Pacific Ocean as observed by Soviet expeditions. (Meteorological, aerological, and synoptic conditions)

SOURCE: AN SSSR. Institut okeanologii. Trudy, v. 78, 1965. Issledovaniya atmosfernoysirkulyatsii i prizemnogo sloya vozdukha nad Tikhim i Indiykim okeanami (Studies of atmospheric circulation and the boundary layer of air over the Pacific and Indian Oceans), 49-80

TOPIC TAGS: atmospheric circulation, atmospheric humidity, wind velocity, oceanographic expedition, cloud formation, cloud cover

ABSTRACT: The meteorological regime of the west wind, the distribution of air flows at various altitudes, and general synoptic conditions are investigated on the basis of the data obtained by the research vessels "Vityaz", "Voyeykov," and "Shoral'skiy", as well as data from archives and scientific publications. Data are presented on the temperature of ocean and air surface layers, atmospheric humidity, the temperature regime of upper atmospheric layers, evaporation, and cloud formation. The data show (1) that the boundaries of the west wind zone are subject to seasonal change in the

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L 38677-66

ACC NR: AT6012601

equatorial latitudes of the Pacific Ocean; (2) the mean velocity of the west wind is 5-6 m/sec at the surface and 7.5 m/sec for the tradewinds; (3) the meteorological regime in the belt of the western winds differs considerably from that observed in the same latitudes when strong tradewinds are present; (4) cloudiness is more often observed in the equatorial latitudes than in the tradewind flows; (5) equatorial western winds never reach the upper limit of the troposphere; (6) the boundary between the equatorial and tradewind flows serve as the frontal separation; (7) the synoptic analysis indicates that the formation of equatorial west winds is usually connected with the formation of shallow depressions in a cyclonic circulation; and (8) the seasonal formation and development of west winds in the western part of the Pacific Ocean is pronounced near the continents of Asia and Australia. Orig. art. has: 21 figures, 11 tables.

SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 010/ OTH REF: 007

Card 2/2 vmb

USSR / General Biology. Plant Genetics.

B

Abs Jour: Ref Zhur-Biol., No 23, 1958, 103365.

Author : Solntseva, M. P.

Inst : Institute of Biology, Academy of Sciences BSSR.

Title : Inheritance of Characteristics in the F₁ Generation in Intersort Hybridization of the Strawberry.

Orig Pub: Byul. In-ta biol. AN BSSR, No 2, 1956 (1957), 208-221.

Abstract: A study was made of the first generation of crossings of strawberries of the Komsomolka, Negritenok, Uspekh and Mysovka varieties. Such characteristics as the size of the berry, number of peduncles and the number of blossoms in the raceme of the F₁ hybrids are, as a rule, intermediate. The majority of F₁ generation seedlings also have the average number of peduncles on a bush of both parent forms

Card 1/2

25

USSR / General Biology. Plant Genetics.

B

Abs Jour: Ref Zhur-Biol., No 23, 1958, 103365.

Abstract: and the average size of the fruit. The crossed varieties are heterozygotic with respect to the color of the berry: even after crossing varieties with the same berry color, berries with different colors appear, viz., dark-red, red and bright-red. The red color of the berry is dominant over the dark-red color. In crossing pistillate forms with bisexual forms the inheritance of sex in the F_1 generation not uncommonly deviates from the 1:1 proportion because of the increase in the number of hermaphroditic forms. The author suggests that this deviation is caused by the youth of the paternal variety in a phylogenetic sense. -- S. Ya. Krayevoy.

Card 2/2

SOLNTSEVA, M. P., Cand Biol Sci -- (diss) "Characteristics of interspecific ^e hybrids of the garden strawberry, process of fertilization, and peculiarities of ^{the} development of its generative organs." Minsk, 1957. 21 pp (Inst of Biology of Acad Sci BSSR), 100 copies (KL, 52-57, 105)

- 36 -

SOLNTSEVA, M.P.

Inheritance of characteristics in F_1 intervarietal strawberry
hybrids. Biol. Inst. biol. AN BSSR no.2:208-221 '57. (MIRA 11:2)
(Strawberry breeding)

SOLNTSEVA, M. P.

20-5-41/48

AUTHOR: Solntseva, M. P.

TITLE: Some Peculiar Traits in the Structure of Embryo Sac in Fragaria grandiflora and the Phenomenon of Polyembryony (Osobennosti stroyniya zarodyshevogo meshka Fragaria grandiflora i yavleniye polyembrionii)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 116, Nr 5, pp. 866 - 869 (USSR)

ABSTRACT: Up to recent times the occurrence of polyembryony in garden strawberry (Fragaria grandiflora Ehrh.) was denied. However, the investigation of its embryo sac and its structure in the ripe state justifies the assumption of such a possibility. From the references (references 1, 2, 3, 4 and 6) it appears that the possibility of a formation of several embryo sacs in one nucellus exists. However, in a single nucellus not more than only 2 normally developed embryo sacs were discovered. Seminal buds were observed in which 2 embryo sacs, with an own nucellus each, developed. Very often seminal buds were found with several embryo sacs in one nucellus, i.e. a fusion of the embryo sacs took place. Such embryo sacs can occur in different stages of development: one can be completely developed, whereas in the other (though with 8 embryos) the elements are not yet in the position usual for a normal ripe embryo sac; the third

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20-5-41/48

Some Peculiar Traits in the Structure of Embryo Sac in Fragaria lora and the Phenomenon of Polyembryony

has only 2 embryos (figure 2). It could be possible that the weather condition of single years have influenced the development of additional embryo sac. The occurrence of fused embryo sacs is different in single flowers. The highest quantity of ripe embryo sacs amounted to 6. The elements of two fused embryo sacs can differ in size or have the same size. In seminal buds with several embryo sacs their elements are usually of different size (figure 3). The structural properties of the embryo sac of the strawberry, the presence of fused embryo sacs in one nucellus can be the reason of polyembryony. In the case of a normal development of several embryo sacs and in the case of normal fertilization a development of several embryos in a single seminal bud is possible. Such cases of polyembryony were observed in preparations (figure 4). Whether the development of the two embryos is completed, whether one or both die is difficult to say, however, seeds with two embryos were found. It is to be assumed that such twin plants develop from seminal buds with two embryo sacs with independent nucelli. However, there is the possibility that embryos of two fused embryo sacs have a normal development. From the given data it can be concluded that the polyembryony occurs in the strawberry. Suezh (reference 5)

Card 2/3

20-5-41/48

Some Peculiar Traits in the Structure of Embryo Sac in Fragaria gracillora and the Phenomenon of Polyembryony

denied such an assumption with the argumentation of a regular segmentation in the embryo formation. Adventive and additional embryos in one nucellus he did not find. In present case we have a pseudo-polyembryony, i.e. a development of two germs of two egg cells in one nucellus. This is due to structural peculiarities - presence of fused embryo sacs - of the seminal bud. There are 2 figures, 1 table, and 7 references, 1 of which is Slavic.

ASSOCIATION: Institute for Biology AN USSR
(Institut biologii Akademii nauk SSSR)

PRESENTED: March 20, 1957, by N. V. Tsitsin, Academician

SUBMITTED: March 19, 1957

AVAILABLE: Library of Congress

Card 3/3

SOLNTSEVA, M.P.

Some data on fertilization in *Fragaria ananasa* Duch. Bot. zhur. 46
no.3:371-377 Mr '61. (MIRA 14:3)

1. Botanicheskiy institut imeni V.L. Komarova AN SSSR, Leningrad.
(Strawberries) (Fertilization of plants)

SOLNTSEVA, M.P.

Inheritance of the sex type of the flower in F_1 of intervarietal crosses in the cultivated strawberry *Fragaria ananassa* Duch. Bot. zhur. 48 no.2:
(MIRA 16:4)
182-191 F '63.

1. Botanicheskiy institut imeni V.L.Komarova AN SSSR, Leningrad.
(Strawberry breeding) (Plants, Sex in)

SOINTSEVA, M.P.; YAKOVLEV, M.S.

Conditions determining the development of monocotyledonous
characters in the early embryogenesis of reather grasses. Bot.
zhur. 49 no.5:625-633 My '62. (MIRA 17:8)

1. Botanicheskiy institut imeni V.I. Komarova AN SSSR, Leningrad.

SOLNTSEVA, N.O.; ZUBOVA, M.M.

Calculating the elements of wind waves for the northern part of
the Atlantic Ocean. Trudy Okean kom. 9:151-160 '60. (MIRA 14:1)

(Atlantic Ocean--Waves)

SOLNTSEVA, N.O.

Calculation of the elements of wind waves during the cruise of
the expeditionary ship "Mikhail Lomonosov." Trudy Okean kon. 9:
161-171 '60. (MIRA 14:1)

(Waves)

TITOV, L.F.; SOLNTSEVA, N.O.; PISAREVSKAYA, V.D.

Calculation of fluctuations of the level of the sea during a period
of storms in the western Gulf of Finland. Trudy GOIN no.69:28-45
'62. (MIRA 15:11)

(Finland, Gulf of--Oceanography)

S/169/62/000/007/014/149
D228/D307

AUTHORS:

Lozinskaya, A. M. and Solntseva, N. T.

TITLE:

A marine string gravimeter

PERIODICAL:

Referativnyy zhurnal, Geofizika, no. 7, 1962, 17, abstract 7A112 (V sb. Sostoyaniye i perspektivy razvitiya geofiz. metodov poiskov i razvedki polezn. iskopayemykh, M., Gostoptekhizdat, 1961, 423-429)

TEXT: A marine string gravimeter with a frame suspension has been developed. It is fitted with horizontal string accelerometers and a gyro-vertical for taking into account horizontal disturbing accelerations and tilts. In the device apparatus is provided for measuring and continuously registering the high-frequency disturbing accelerations of the ship's vibration. The equipment's separate units are described. Nautical tests of two string gravimeter prototypes were made on the Caspian Sea. 45 nautical measurements, confined to 13 marine coordinate points, were carried out during 9 days. Sample records of string gravimeter readings are presented.

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ACCESSION NR: AT4016827

S/2604/63/000/048/0073/0077

AUTHOR: Solntseva, N. T.; Fomina, Z. I.

TITLE: Field testing of string microbarometers

SOURCE: Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki. Razvedochnaya i promy'slovaya geofizika (Prospecting and industrial geophysics), no. 48, 1963, 73-77

TOPIC TAGS: geophysics, microbarometer, barometer, string microbarometer

ABSTRACT: Due to the wide application of gravimetric prospecting, the problem of improving the accuracy of barometric levelling to 0.5-1.0 m. is of great importance. This investigation includes the results of field testing four string microbarometers made in the laboratory of VNIIGeofizika. The theory and design of the string microbarometer were described by A.M. Lozinskaya in Prikladnaya Geofizika (Applied Geophysics), No. 34, 1962. The tests were performed on the Kiev highway with a maximum difference of elevations of 60 m. The observation points were 1-2 km from each other. Readings were taken every 15 minutes. The duration varied from 4 to 6 hours. Microbarometric levelling near

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ACCESSION NR: AT4016827

Naro-Fominsk in the Moscow suburbs showed an accuracy of $\pm 0.5-0.7$ m in comparison with geodetic levelling. The accuracy of microbarometric levelling in comparison with available bench marks was $\pm 0.7-0.8$ m in the Perm Region. Near Alma-Ata the accuracy of separate measurements was ± 0.8 m. The results show the high stability of string microbarometers over a long period. This is very important for permanent barometric stations, while the possibility of radio transmission of the readings is also of great significance for the future. The instruments worked properly both in field and laboratory conditions. Orig. art. has: 3 figures.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki (All-Union Scientific-Research Institute of Geophysical Prospecting)

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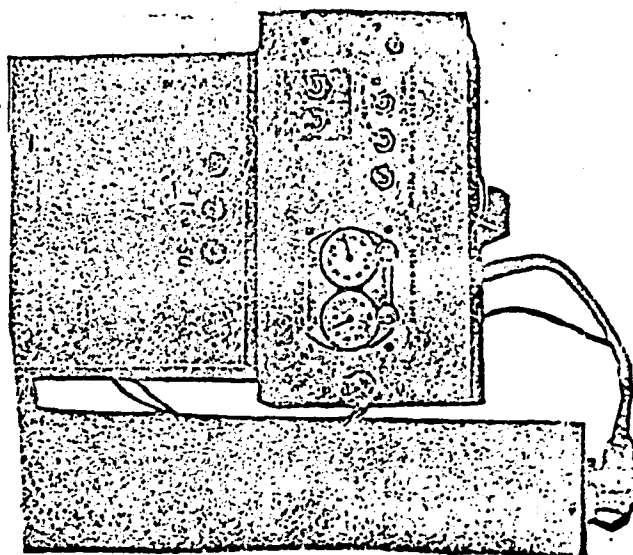
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ENCLOSURE: 01

Figure 1. General
view of string micro-
barometer with registra-
tion device.



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BAKANOV, N.A.; BURMAN, M.Ye., inzhener; SOLNTSEVA, N.V.; PRITYKINA, L.A.,
redaktor; MEDVEDEVA, L.A., ~~tekhnicheskii redaktor~~

[Reference manual for starch and syrup production] Spravochnik po
krakhmalo-patochnomu proizvodstvu. Pod red. M.E.Burmana. Moskva,
Pishchepromizdat, 1952. 376 p. (MLRA 7:9)
(Starch industry) (Syrups)